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THE FIRST DECADE OF THE SWISS FEDERAL RAILWAYS

SUMMARY

Discussions of the nationalization of railways in Switzerland, 342. — Arguments advanced in favor of nationalization, 343. — Conditions of employment on the federal railways, 346. — Organization of the management of the federal railways, 347. — Government rate making, 352. — Improvement of the service, 354. — Financial results of government ownership, 356.

"In Switzerland, where the government has sought to please all the people by lowering rates, increasing facilities, and raising wages, the railways which were doing well under corporate management show a deficit after ten years of governmental administration"; and "have become a drain upon the tax-payers." So writes Mr. Logan G. McPherson in his recent book on *Transportation in Europe* (pp. 200, 172). Mr. Carl S. Vrooman, on the other hand, in his equally recent book on *American Railway Problems in the Light of European Experience* (p. 166), declares that "during the short period of eight years of actual government management considerable real and substantial progress has been made. Rates have been lowered, wages raised, hours of labor shortened, the service improved, and at the end of sixty years or thereabouts, the people will be the proprietors of their railways, which actually will have paid for themselves out of profits." The conclusions reached by these two writers are noteworthy. Both are trained investigators, and both are conscious of their responsi-

bility to the public for the reliability of their facts and the reasonableness of their conclusions. In the face of such a clash of opinion an independent examination of the evidence seems in order.[1]

The law for the repurchase of the steam railways of Switzerland by the federal government was passed by the Federal Assembly October 15, 1897, and accepted by the people February 20, 1898, by a vote of more than two to one (386,634 to 182,718). There were then five main lines of steam railway in Switzerland, the Central, the North-Eastern, the United Swiss, the Jura-Simplon, and the St. Gothard. The negotiations for the completion of the purchases were protracted by the refusal of the companies to accept the terms originally offered by the federal government. The dispute was carried into the courts, and finally determined by two decisions of the Federal Court, January 18–21, 1899, and July 18–19, 1899. The next two years were devoted to concluding the arrangements with the companies, and to perfecting the organization of the federal railway administration. The *Generaldirektion* of the federal railways met for the first time on July 1, 1901, when it took over the duties of the board of directors of the Central railway. It assumed the active management of the Central and North-Eastern lines on January 1, 1902, of the United Swiss on July 1 of the same year, of the Jura-Simplon on May 1, 1903, and of the St. Gothard on

[1] Public Documents relating to the Swiss Federal Railways are: –

1. Bericht des eidgenössischen Eisenbahndepartements über seine Geschäftsführung im Jahre – (annual).

2. Bericht und Antrag des Verwaltungsrates der schweizerischen Bundesbahnen an den schweizerischen Bundesrat betreffend das Budget der schweizerischen Bundesbahnen für –, zu Händen der Bundesversammlung (annual).

3. Bericht der Generaldirektion der schweizerischen Bundesbahnen über die Geschäftsführung und die Rechnungen des Jahres – an den schweizerischen Bundesrat zu Händen der Bundesversammlung (annual).

4. Statistische Tabellen. Beilage zum Bericht der Generaldirektion (annual).

5. Rechnungen für das Jahr – (annual).

May 1, 1909. The beginning of Swiss federal railway management may therefore be dated from July 1, 1901, altho the government was not in a position to put its policies into general effect until two years later.[1]

From the beginning the Swiss experiment in government ownership and operation of railways has interested the students of the railway problem. The early discussions of the nationalization of the Swiss railways shed little light, however, on the general issue of public ownership. Writers on the subject could do little more than speculate upon the success or failure of the federal railways, or narrate the events comprising the process of nationalization with varying sympathies according to their respective temperaments.[2] As the first decade of the Swiss federal railways approaches completion, the evidence bearing upon the record of governmental management becomes more instructive.

Probably the fairest procedure for determining the measure of success obtained by the Swiss government in the railway business is to ascertain first what it aimed to accomplish. The arguments advanced by the Federal Council in advocacy of public ownership were as follows.[3] 1. The desirability of consolidating the independent railway lines of Switzerland in

[1] The best accounts of the events leading up to repurchase, of the popular discussion of the proposal to repurchase, and of the negotiations with the companies and the inauguration of governmental management, respectively, are: G. Keller, Der Staatsbahngedanke bei den verschiedenen Völkern, Bern, 1897; H. Micheli, Le Rachat des chemins de fer en Suisse, Circulaire du Musée social, No. 18, le 25 mai, 1898 (translated by J. Cummings and published in American Economic Association Studies, vol. iii, pp. 349–420, 1898); and P. Weissenbach, Die Durchführung der Verstaatlichung in der Schweiz, Archiv für Eisenbahnwesen, vol. xxvii (1904), pp. 1259–1327, and vol. xxviii (1905), pp. 105–156.

[2] Cf., *e.g.*, Henri Haguet, Le Rachat des chemins de fer suisses et ses consequences, Paris, 1902; and Edgard Milhaud, Le Rachat des chemins de fer, Paris, 1904.

[3] Botschaft des Bundesrates an die Bundesversammung betreffend den Rückkauf der Eisenbahnen vom 25. März, 1897. This message constituted the platform and campaign handbook of the advocates of public ownership prior to the referendum election in February, 1898.

order (*a*) to save the expenses of the superfluous company and general managers' offices, (*b*) to secure the advantages of monopoly and organization on a larger scale in equipment and maintenance of way, and in operation and the security of traffic, and (*c*) to improve the local service by the more generous employment of the profits on the profitable portions of the business for the extension of the service into less profitable places. 2. The reduction of fixed charges by the substitution of the credit of the government for that of the private companies. 3. The application of net profits to the amortization of capital until the entire railway system should be owned clear of debt, thus eventually making possible a great reduction of rates (France, Germany, and Austria, it was believed, would be in a similar position by the middle of the twentieth century). 4. The abolition of discriminations of all kinds, and the establishment of uniform and just rates (the message intimated that the lowest rates for each class of traffic then in force on any private road would be extended to all the roads to be acquired by the federal government). 5. The more effective representation of the interests of shippers and of the travelling public as opposed to the interests of stockholders in railway management. 6. The improvement of the conditions of employment of the employees (*a*) by standardizing the various wage scales and labor regulations (the Federal Council intimated that the highest wage scales in force on any of the roads to be acquired would be extended to all the roads to be acquired), (*b*) by better enforcement of federal labor legislation than was possible while the lines were under private management, and (*c*) by maintaining superannuation and other benefit funds on a sound and liberal basis. 7. The elimination of

foreign influence from the management of Swiss railways (apparently in at least three of the leading roads foreign stockholders then held a controlling interest, and such control, in the opinion of the Federal Council, was politically dangerous).

The message of the Federal Council was tinged with a strain of sentiment. There was some appeal to the national pride, which ought to insist upon the popular management of those affairs which are of prime importance to the safety and well-being of the commonwealth, and to the national prejudice, which ought not to tolerate the threatened control of Swiss domestic commerce by aliens. But in the main the Federal Council founded its case upon sober calculations of lower rates and additional facilities for shippers and travelling public, of improved conditions for railway employees, and of better management generally. The arguments of the Federal Council were tersely summed up by a sympathetic American writer.[1] "The nationalization of the Swiss railroads," he writes, "was inevitable, a natural fruit of the spirit of democracy"; but the "direct efficient cause" was "business opportunism."

Let us now consider the results of this policy of "business opportunism." In the first place, the political dangers of the alien control of Swiss domestic transportation, whatever they may have been, were definitively removed. So much nationalization accomplished. Much of the purchase money, to be sure, was borrowed abroad on the credit of the government, but foreign bondholders and foreign stockholders are not of the same genus. The Swiss people by the nationalization of their railways not only assumed the responsibility but obtained the power to manage

[1] H. D. Lloyd, A Sovereign People, p. 171.

them in the interests of Swiss shippers, travellers, and railway workers. After nationalization, there could be no danger of the exploitation of the Swiss people as a whole. The only possible danger would be that of the exploitation of one class of the people by another. The general public in its political capacity might exploit the railway workers by denying them just compensation and conditions of employment; conversely, the railway workers, by gaining an improper influence over the government of the day, might exploit the general public by obtaining excessive wages at the cost of reasonable rates of transportation. In fact the relations between the state employer and the railway workers have been singularly harmonious and free from friction. The workers have never struck, nor even threatened to strike. The government, on the other hand, has always maintained its authority, and, while treating its employees with liberality, has never given them more than could be publicly shown to be their due.

The conditions of employment on the federal railways were regulated by the laws of June 29, 1900, and December 19, 1902. The various grades of employees were classified, and maximum and minimum rates of pay were prescribed for each class. The highest rates paid on any of the private roads were adopted as the minimum rates for the corresponding classes of the federal service. The new rates went into effect May 1, 1903, and each third year thereafter the pay of every employee who had served through the preceding three years was to be increased by three hundred francs until the maximum for the class should be reached. An eleven-hour day was established (which is less than the usual Continental European working-day), with the further provision that every train-

crew should have at least ten hours of unbroken rest in each twenty-four, and all other employees at least nine hours. More liberal provision than had previously been the rule was made for a weekly day of rest and for annual vacations. The common laborers shared in the improved conditions of employment, but the most highly paid administrative officers suffered, since in view of the salaries paid to other officers in the service of the federal government, it was not possible to continue the fancy salaries sometimes paid by the private companies to favored officials. These changes, the improved conditions of employment even more than the higher wages, tended to increase the operating expenses of the federal railways; but they had been practically promised in advance, and their probable cost had been reckoned with by the advocates of nationalization.[1]

The labor policy of the Swiss railway management is revealed by the conduct of the employees when the pressure of the recent increase in the cost of living began to be felt. The standard wage scale was established upon the basis of the general level of prices and wages in 1899. Since then the rise in the general level of prices has been world-wide. According to Calwer's index number, which most adequately portrays the monetary situation in Switzerland, the rise in the cost of living from 1899 to 1907 amounted to $17\frac{1}{2}$ per cent. The highest rates of wages in effect upon the private railways (which were the basis of the governmental rates) had been established in 1896 and the rise in the cost of living since then amounted to over 27 per cent. The men began to complain, respectfully, but during 1906 with increasing vigor.

[1] Cf. Botschaft des Bundesrates an die Bundesversammlung betreffend die Arbeitsverhältnisse der Bundesbahnen vom 1. December, 1899.

The government, when confronted by the men with family budgets and other pertinent evidence of the fall in real wages, recognized the justice of their claims, but wished to postpone the revision of their wages until a general act could be prepared that would apply to all federal employees. In December, 1906, the Union of Postal, Telegraph, and Customs Officials, the Union of Swiss Transportation Laborers, and the Union of Swiss Transportation Officials simultaneously petitioned the Federal Assembly for a special supplement to their regular wage during the year sufficient to compensate them for the increase in the cost of living. The Federal Council ultimately recommended that each married employee and each unmarried employee with persons dependent upon him for support, earning less than 4000 francs a year, should receive a supplement to his annual earnings of 100 francs; and that all other employees earning less than 4000 francs should receive 50 francs. The Federal Council took pains in its message to the Assembly to remark on the courteous tone of the employees' petitions and the reasonableness of their request.[1] The payment of this "high-prices-increment" was repeated in 1907 and 1908. In 1909 the scope of the extra payment was extended, and finally a law of June 23, 1910, revised the classification of railway employees and established a general and permanent increase of wages.[2]

This incident in itself is not perhaps of great importance, but it illustrates the good understanding that prevails between the railway management and

[1] Botschaft des Bundesrates an die Bundesversammlung betreffend die Bewilligung eines Spezialkredites behufs Ausrichtung von Teuerungszulagen für das Jahr 1906 an die eidg. Beamten und Angestellten vom 2. April, 1907.

[2] Botschaft des Bundesrates an die Bundesversammung betreffend die Besoldung der Beamten und Angestellten der schweiz. Bundesbahnen vom 25. October, 1909.

its employees. The influence which the latter exert in order to bring about an improvement of their conditions of employment has no unhealthy effect upon Swiss politics. It is not so strong as to subordinate the good of the service to their private advantage, and yet strong enough to secure the prompt recognition of their just claims. Nor has governmental management brought with it an extravagant overmanning of the roads. The rate of increase in the number of employees on the federal railways up to the end of 1908 was less than the increase during the same period on the St. Gothard, which remained under private management until the following year, altho the rate of development of traffic was greater on the federal lines than on the St. Gothard. The total number of employees at the end of 1909 was 34,575, and there is absolutely no evidence of "politics" in the management. Suitable provision is made for insurance against sickness and accident, pensions are provided in the event of chronic infirmity or old age, and the organization of labor is provided for by the management itself. Thus public ownership has brought with it the adoption of methods that recognize the mutuality and solidarity of labor, and convert the craving for combination and mutual support, so characteristic of modern wage-earners, into a productive asset.

The management of the Swiss federal railways was organized expressly with a view to enabling representatives of Swiss shippers and the travelling public to participate in the conduct of affairs. The plan of this organization was worked out in advance of nationalization, and set forth in the message of the Federal Council of March 25, 1897.[1] The popularity of the

[1] The law of October 15, 1897, regulating the organization of the administration of the Swiss federal railways, is translated and reprinted in full in Vrooman, American Railway Problems, appendix 4. See also, W. Exner, Studien über die Verwaltung des Eisenbahnwesens mitteleuropäischer Staaten, Vienna, 1906, pp. 43–61.

plan was undoubtedly one of the leading factors in the victory of the policy of public ownership. It was desired that the administrative organization should be made independent of political influence and yet that it should be so closely connected with the government that there would be no danger of its becoming a state within a state, a body that might come into conflict with the government itself. Hence the administration of the federal railways forms a separate division of the federal administration, and the finances of the railways are entirely disconnected from the finances of the Confederacy. The supreme railway authority is the Federal Assembly, which has cognizance of the following matters: the ratification of plans for the construction and acquisition of new railways, and of loan operations and plans of amortization, the sanctioning of the classification of employees and of the fixing of schedules of wages, and the approval of the annual budgets, and of the annual accounts and reports of operations The general control of the management is entrusted to the Federal Council, which prepares all business requiring definitive action on the part of the Federal Assembly, executes the policies of the Assembly, and appoints the members of the *Generaldirektion*, and of the district directories, and the government members of the federal administrative council and of the district administrative councils. The general directory has charge of the employees and the actual operation, and prepares plans and reports for submission to the administrative council. The administrative council scrutinizes the accounts, examines the annual statements, and approves the draft of the railway budget. It has charge of the freight and passenger tariffs and classifications, approves the general plan of train schedules,

adjusts the relations with other lines, regulates competitive traffic, and renders final decision in regard to construction and additions, both of plant and of equipment. Under these are the district directories and administrative councils for the five districts into which the federal railways are divided.

The feature in the plan of organization to which it has owed much of its popularity among shippers and the general public is the administrative council. This is composed of fifty-five members, twenty-five of whom are chosen by the Federal Council, a like number by the cantons and half-cantons, and five by the district councils. The latter in practice are usually the presidents of the five district councils. The others are chosen with due regard to the interests of agriculture, industry, and commerce, respectively, for terms of three years. The Federal Council proceeds to the election of its quota only after the cantonal and district council elections have been made, and not more than nine of the twenty-five federal appointees may be members of either branch of the Federal Assembly. The district councils consist of fifteen to twenty members, four of whom are chosen by the Federal Council, and the others by the cantons within the district, with due regard to the representation of the various economic interests. The members receive annual passes and a *per diem* for their actual time devoted to the public service. This system of councils was probably suggested by the analogous railway councils, created by von Maybach for the Prussian state railways, which have worked so well in Germany.[1] The district councils meet quarterly, the administrative council monthly. The record of busi-

[1] Cf. A. N. Holcombe: Public Ownership of Telephones on the Continent of Europe, ch. 3.

ness transacted by the councils is published every year. Thus thoro publicity is combined with the representation of the interests of shippers and the public in such a way as to lead the patrons of the railways to feel that those who pay the rates have a share in the responsibility for their making, and that those who use the railway facilities have a voice in their creation. Neither fiscal exploitation on the part of the federal government, nor personal or local discrimination in favor of privileged interests, can well occur under such a system of management. The security for reasonable rates, in the sense of rates calculated to promote public rather than private interests, seems better than under any possible system of private management. At any rate this mode of organization has given uninterrupted satisfaction to the Swiss people.

As soon as the government had gained control of a sufficient number of lines it proceeded to fulfil its pledges with regard to rates.[1] The principles of the revision of rates were laid down in a message of the Federal Council to the Federal Assembly of November 17, 1899. The fundamental principles of the revision were the standardization of the various schedules in effect on the private roads, full publicity of rates, ample notice of changes, and the coöperation of shippers and railway management in the making of rates. With the latter object in view, the federal railway department sent out copies of the preliminary draft of the revised schedules to the various shippers' associations, — the Swiss *Handels- und Industrieverein*, the Swiss *Gewerbeverein*, the Swiss *Bauernverband*, and the Swiss *Eisenbahnverband*. All these associations cordially responded to the railway department's in-

[1] Law of June 27, 1901.

vitation to hand in their criticisms of the proposed schedules. The schedules were finally considered by the Federal Assembly, and enacted to go into effect May 1, 1903, on the four main lines then in the hands of the government. The law provided an elastic process of rate making for service in the future. Increases or cancellations of rates require three months' advance notice, but the period may be shortened, if material reductions accompany increases of rates, or if international through rates are increased on the external portion of the route only. Reductions of passenger rates must remain in effect at least three months, and of freight rates at least one year, but reductions may be granted for shorter periods if the period is stipulated in advance. These restrictions do not apply to excursion rates. Thus the public enjoys complete security against unfair discrimination (for there have never been any charges of secret rebating or criminal collusion between railway officials and favored shippers) without unduly restricting the power of the federal railways to adapt their charges to special conditions.

The government has retained the system of three classes of passenger service. The third class, however, and under certain circumstances even the second, may be omitted from express trains, and the first class, and under certain circumstances, even the second, may be omitted from accomodation trains. In fact, these omissions are freely made, and the Swiss three-class system works out in much the same way as the American system of Pullman and tourist cars, and day coaches. The schedule of passenger rates adopted for the federal lines was the lowest in effect at the period of repurchase on any of the private lines. The railway traffic and general economic

conditions are so different in Switzerland and in the United States that a comparison of passenger rates is fruitless, and the same statement is true of freight rates. The classification of freight is relatively simple. Provision is made for the special classification of raw materials used in agriculture, and of some other commodities. Special rates may be made out of consideration for foreign competition, in order to secure equally favorable treatment for domestic shippers on foreign railways, and to secure transit traffic from competing lines, provided that domestic shippers are not injured thereby. In times of public distress the Federal Council may make special rates on foodstuffs and live-stock. The various freight rate tariffs charged by the private companies were not withdrawn until the new standard rates could be properly adjusted, and it was not until July 1, 1904, that the new rates were put into effect. Thus the pledges of the Federal Council relating to rates, contained in the message of 1897, advocating public ownership, were carried out to the letter, and in view of all the circumstances the period that elapsed was not unduly prolonged.

The law of July 27, 1901, not only established a satisfactory system of rate making, but also provided for the redemption of the pledges for improved service. The number and speed of trains and the supply of rolling-stock has been increased, terminal facilities have been improved, and ways more solidly maintained. The reports of the chambers of commerce of Swiss cities and of other bodies authorized to speak in the name of the economic interests of the country are full enough of specific criticisms of the service and suggestions for its improvement, but there is no disposition to disparage the capacity of the railway

administration or to condemn its conduct of affairs. There has never been any dispute among the critics of the Swiss federal railways over the adequacy and efficiency of the service, nor is there any between the two writers mentioned at the beginning of this article. Mr. Vrooman states that "rates have been lowered, wages raised, hours of labor shortened, the service improved," and Mr. McPherson does not contradict this statement. The difference of opinion is as to who is paying the bills. One writer says the railways are more than paying their way; the other, that they are a drain on the tax-payers. The unsettled question in the matter of the Swiss federal railways is that of their financial standing.

The popular majority which sanctioned the program of public ownership in 1898 had not expected to make of the federal railways a fiscal monopoly. The earning of a large revenue for the government was not among the advantages of nationalization urged by the Federal Council in its message of 1897. The latter had declared, on the contrary, in favor of the application of net earnings to the amortization of the railway loans. The Swiss regarded the funded debt in the light of a mortgage upon their railway property, and determined to own their property clear of such charges before diverting net earnings to the federal treasury. The Federal Council's purpose in advocating the ultimate extinction of interest charges was to facilitate an eventual reduction of rates rather than to secure a fresh source of public revenue. The period of sixty years was selected as that in which the funded debt should be amortized. The annual payments necessary to effect such amortization were accordingly computed, and are made a fixed charge in each annual railway budget. The policy of the railway management

was understood from the beginning to be to earn no more profit than should be necessary to meet these amortization charges, remitting surplus earnings to the public in the form of better service or lower rates rather than in that of cash contributions to the federal treasury. There has not yet been any connection between the railway profit and loss account and the general federal revenues.

The item of net earnings in a federal railway statement is accordingly not comparable with a similar item or with anything in an American railway statement. It actually represents the surplus profits over and above the interest charges (averaging about $3\frac{1}{2}$ per cent) on the entire funded debt and the amortization charges on the same. The latter, which in substance are a kind of deferred profit, and would ordinarily be classified under the head of profits, amounted to 4.3 million francs in 1903, and were estimated at slightly over 8 millions in the budget for 1911. The sum of interest and amortization charges represents not much over 4 per cent upon the funded debt, and is much less than the interest and dividend charges upon any profitable American road. In other words, the cost of the capital devoted to the use of the shipping and travelling public by the Swiss government is materially less than the cost of the capital devoted to the use of the American public by American railways. Other things being equal, the cost of service on the Swiss railways must be less than if private enterprise were employed to render the same service. Hence it would appear not impossible that the Swiss government might reduce rates, raise wages, shorten the hours of labor, and improve the service, as it has done, and still make both ends meet. Under the peculiar Swiss conditions, then, the test of financial success is

the proximity of the profit and loss item in the accounts to zero.

There has been a wide-spread impression in recent years, both in Switzerland and elsewhere, that the federal railways have proved a financial failure.[1] This impression is founded largely upon the annual official budgets. Each year since the revised rates of wages and passenger and freight tariffs were put into effect, the railway management itself has estimated that the next year would close with a deficit. Thus in a sense it is true that the federal railways year after year have been having to face deficits. These deficits, however, have been more apparent than real. The actual financial results have regularly been more favorable than the budgetary estimates with the single exception of the year 1908, and the federal railways have regularly earned a surplus over and above the amounts required for the interest and amortization charges except in the two years 1908 and 1909. This is indicated by the following table, computed from the official reports, showing in parallel columns the estimated deficits and the actual results.

Year	Profit (+) or loss (−) as estimated in budget	Profit (+) or loss (−) actually resulting
1902	....	+4,422,420
1903	....	+1,030,682
1904	− 1,209,725	+ 60,735
1905	− 2,088,400	+ 651,734
1906	− 4,660,350	+2,548,523
1907	− 2,528,527	+ 429,812
1908	− 2,498,790	−5,823,166
1909	−10,927,330	−4,091,020
1910	− 9,125,000	+7,948,758

Some of these figures are not the same as the corresponding figures in the official budgets and reports.

[1] Cf. P. Favarger, La Situation des chemins de fer fédéraux en Suisse. Journal des Économistes, Décembre, 1910.

The official budgets do not include with the regular estimates for the year any estimate of the so-called "high-prices-increments" paid since 1906 to the railway employees. Beginning with 1907, I have included such an estimate, based on the sum actually so paid in the preceding year. The official reports often carry over surpluses or deficits into the accounts of the ensuing year, where they serve to conceal the true result of that year's operations. Thus the report for 1910 states the result of the year's operations to be a deficit of 1,535,616 francs, whereas in fact the result was to diminish the accumulated deficits of the two preceding years by the amount shown in the table, that is, the largest surplus in the history of the federal railways. Taking the results of the entire operations up to the end of the decade, the surpluses exceed the deficits. Since, however, a portion of the earlier surpluses were employed for extraordinary amortizations, the official balance sheet at the end of 1910 showed a net deficit of one and a half million francs on the eight years' operations, or a little more than one-tenth of one per cent of the present funded debt of the federal railways. The amortization charges for a single year, which are a species of profit, would wipe out this deficit several times over. Since all interest and amortization charges have regularly been paid, this nominal deficit may be disregarded. Indeed it should have been wiped out by the results of the first quarter's operations in 1911. So near an approach to the ideal zero of surplus profits must be considered a sufficient disproof of the charge of financial failure.

The important concern is whether this state of equilibrium between income and outgo is likely to be permanent. We must therefore inquire into the

causes of the series of unfavorable budgets prepared by the railway management and of the two deficits actually incurred.

The reduction of rates, improvement of service, and increase of wages, as pledged by the Federal Council in its message of 1897, had for their immediate effect, as had been anticipated, a more rapid increase of operating expenses than of traffic receipts. But the advocates of nationalization had contended that this increase would be met out of savings in other directions, especially in the lowering of the cost of capital and in the more economical management of the railways as a consolidated monopolistic system. Hence, unless the advocates of the policy of "business opportunism" were mistaken in their calculations, the causes of the unfavorable budgets must lie elsewhere.

The explanation seems to be simply that the Federal Council had calculated very closely, when it outlined the advantages of nationalization, and abnormal economic conditions could easily disturb the balance of income and outgo. In 1902–03, when the transfer of the four leading private lines was made, Europe generally was suffering from an acute commercial depression. The receipts had already shown a tendency to fall off before the transfers were made. The new governmental management found that the private systems had been allowed to run down during the preceding period of uncertainty more than had been anticipated. Maintenance and renewal requirements were accordingly abnormally heavy, and the immediate outlook for an increase of traffic, despite the promised reduction of rates, was not bright. Hence the unfavorable budgetary estimates for the years 1904–06. The commercial depression, however, proved to be

only temporary; traffic, both passenger and freight, increased with unexpected rapidity; and in 1906 an anticipated deficit of nearly five million francs was converted into a surplus of over two and one-half millions. The effect was to stimulate an accelerated increase of expenditures. This is reflected in the budgetary estimates of new construction and equipment to be charged to capital account, as well as in the account of operating expenses. The railway management understood the situation perfectly. Writing in 1906, they stated that "thanks to the development of the passenger and freight traffic, we may hope that in 1906 as in the preceding year operations will be concluded without a deficit, contrary to the anticipations of our budget. If the development of the traffic continues and our anticipations of increased receipts are accordingly realized, the same result will occur in 1907. But it ought not to be overlooked that the continual increase of expenditures cannot be further held in check, so that any business depression will inevitably upset the balance of our accounts." [1]

The unwelcome business depression came at the end of the following year, the year of the American panic. The operating receipts of the Swiss federal railways were less in 1908 than in 1907, altho expenditures were materially greater. The situation was made more acute by the grant of the "high-prices-increments" to the employees. In fact, not only the cost of labor, but that of many other railway supplies had gone up approximately twenty-five per cent in the last ten years. The St. Gothard, the only important Swiss railway at that time still under private management, suffered as severely as did the federal railways. The federal railway management cut down

[1] Bericht und Antrag vom 28. September, 1906, p. 51.

expenses in every legitimate way, suppressing superflous trains, and reducing its working force as much as possible without impairing the efficiency of the service. Yet the policy begun in 1906 of voluntarily adding a supplement to the wages of all employees, in order to enable them to maintain a reasonable standard of comfort in the face of an ever-increasing cost of living, was courageously maintained. Had these payments been discontinued, the federal railways might have passed through the crisis without any deficit, but such a backward step was not suggested. The management was told by its critics that it could not restore the equilibrium of its budget without a radical increase of rates, but no such increase was sanctioned. The management adhered to its policy of retrenchment, and relied upon the return of prosperity to revive the surplus.

The vigor of the policy of retrenchment is revealed in the budgetary estimates of capital expenditures for fresh construction during this period. These amounted to 39.7 millions of francs for 1906, to 42.6 millions for 1907, to 49.5 for 1908, 34.6 for 1909, 31.1 for 1910, and 30.7 for 1911. The operating ratio, which was 61.1 per cent in 1902 and 65.5 per cent in 1903, had risen to 72.8 per cent in 1908. It was reduced by 1910 to the same figure as in 1903. In the official report for 1910 (p. 56), the management was able to point to the complete success of its financial policy. The second decade of the Swiss federal railways begins auspiciously with an estimated surplus, the first budgetary surplus since the government's railway policies have been in effect.[1] The truth is that the Swiss federal railway management is to be highly commended for its energetic and sagacious

[1] Bericht und Antrag für 1911, p. 48. Ibid. für 1912, p. 50.

handling of a difficult situation. In any undertaking in which the margin of profit is calculated so closely as in the Swiss federal railways, abnormal conditions may temporarily produce abnormal profits or losses; but over longer periods of time these should offset one another. There is no reason why the equilibrium between income and outgo should not be permanent.

Our examination of the financial history of the Swiss federal railways leads us to certain definite conclusions. Mr. McPherson's statement that the railways have become a drain upon the tax-payers is not supported by the evidence. For Mr. Vrooman's prediction, on the other hand, that the existing railways will have paid for themselves out of profits in about sixty years, there is substantial foundation in the record of governmental management. Without venturing, however, to predict, we may observe that the Swiss federal railways have already reduced rates, improved the service, raised wages, and made a profit. In short, the evidence of the first decade of the Swiss federal railways is that the policy of "business opportunism" is justifying itself.

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